WHAT IS CLAIMED IS:

1. A method for decoding a compressed video bit stream corresponding to a compressed video signal having a first resolution to a video signal having a second resolution lower than the first resolution, said method comprising:

downscaling the compressed video bit stream; and

thereafter, decoding the downscaled compressed video bit stream to provide said video signal having said second resolution.

2. The method according to claim 1 wherein said downscaling step comprises removing high frequency components of the compressed video bit stream.

3. The method of claim 2 wherein said bit stream uses blocks of a given size, and wherein said step of removing high frequency components provides a bit stream having a modified block size smaller than said given size.

4. The method of claim 3 wherein said given block size is 8*8 DCT and wherein said modified block size is k*k, where k<8.

5. The method according to claim 1 wherein said first resolution is CIF (352*288) and said second resolution is QCIF (176*144).

6. The method according to claim 1, and further including the step of using said video signal having said second resolution to display an image on a display unit at said second resolution.

7. A method for processing a compressed video bit stream corresponding to a compressed video signal having a first resolution to provide a video signal having a second resolution lower than said first resolution for use by a display unit having said second resolution, said method comprising:

downscaling the compressed video bit stream;

decoding the downscaled compressed video bit stream using modified prediction to provide said video signal having said second resolution; and

using said video signal having said second resolution to display an image on said display unit at said second resolution.

8. The method according to claim 7, wherein said bit stream uses blocks of a given size, and wherein said downscaling step provides a bit stream having a modified block size smaller than said given size.

9. The method according to claim 8, wherein said given block size is 8*8 DCT and wherein said modified block size is k*k, where k<8.

10. The method according to claim 7, wherein said step of decoding using modified prediction further includes the steps of:

scaling a motion vector;

if said motion vector is full-pel, using spline-interpolating filters for scaling motion compensation;

if said motion vector is half-pel and k=7, using bilinear blur for scaling motion compensation;

if said motion vector is half-pel in the horizontal and vertical direction and k=6, using bilinear blur for scaling motion compensation; and

if said motion vector is half-pel and k<6, using 4-tap filters with limited blur for scaling motion compensation, wherein said modified block size is k*k, where k<8.

11. An apparatus for decoding a compressed video bit stream corresponding to a compressed video signal having a first resolution to a video signal having a second resolution lower than the first resolution, said apparatus comprising signal processing circuitry which downscales the compressed video bit stream and, thereafter, decodes the downscaled compressed video bit stream to provide said video signal having said second resolution.

12. The apparatus of claim 11, wherein said signal processing circuitry further comprises:

means for modifying the block size of the bitstream from a given size to a modified block size smaller than said given size;

means for discarding high frequency discrete cosine transform components;

means for multiplying the modified block of the bitstream with a modified inverse transform matrix; and

means for using a modified prediction process so as to reduce mismatch degradation.

13. A method for decoding a compressed video bit stream corresponding to a compressed video signal having a first resolution to a video signal having a second resolution equal to or higher than the first resolution, said method comprising:

decoding the compressed video bit stream using modified prediction; and

using said video signal to display an image on a portion of a display unit having said second resolution.

14. The method according to claim 13, wherein said bit stream uses blocks of a given size, and wherein said decoding step is provided a bit stream having a modified block size smaller than said given size.

15. The method according to claim 14, wherein said given block size is 8*8 DCT and wherein said modified block size is k*k, where k<8.

16. The method according to claim 13, wherein said step of decoding using modified prediction further includes the steps of:

scaling a motion vector;

if said motion vector is full-pel, using spline-interpolating filters for scaling motion compensation;

if said motion vector is half-pel and k=7, using bilinear blur for scaling motion compensation;

if said motion vector is half-pel in the horizontal and vertical direction and k=6, using bilinear blur for scaling motion compensation; and

if said motion vector is half-pel and k<6, using 4-tap filters with limited blur for scaling motion compensation.

17. An apparatus for decoding a compressed video bit stream corresponding to a compressed video signal having a first resolution to a video signal having a second resolution equal to or higher than the first resolution, said apparatus comprising signal processing circuitry decodes the compressed video bit stream to provide said video signal to a display unit.

18. The apparatus of claim 17, wherein said signal processing circuitry further comprises:

means for modifying the block size of the bitstream;

means for discarding high frequency discrete cosine transform components;

means for multiplying the modified block of the bitstream with a modified inverse transform matrix; and

means for using a modified prediction process so as to reduce mismatch degradation.